

News & Views

Process-oriented Basic Data for Environmental Management Instruments

www.probas.umweltbundesamt.de

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DOI: <http://dx.doi.org/10.1065/lca2005.03.004>

Within the framework of a sustainable economy, environmentally oriented information and management instruments (e.g., environmental auditing, controlling and reporting, MFA, LCA) are important *tools* for enterprises of all sizes and sectors to analyse, interpret, and finally reduce or avoid environmental impacts stemming from their products, processes, or production sites. *Public administration and consumer protection* require such data as well, e.g. for issues of procurement, and public information.

This gives rise to a significant need for valid and readily available basic data which can be used for the various environmental management instruments.

In the absence of a national database for this kind of information, the German Federal Environment Agency (Umweltbundesamt = UBA) has been working since 1996 – in cooperation with, among others, Öko-Institut – to enhance the interchangeability of life-cycle data by unified data formats, and to create a publicly available data server in the Internet.

In 2000, such a database, offering free public access to environmental basic data, was installed at the UBA under the name of ProBas (process-oriented basic data for environmental management instruments).

In mid-2004, the ProBas website was relaunched to offer more user-friendly access to the data, providing extended search and data filtering options as well as fast access to more than 3,500 data records.

Downloading data is now possible in Excel and PDF formats, and a Help system is offered.

Data sources for ProBas

The ProBas web database is a *library*, i.e. it provides access to external data sources to offer the broadest-possible range of life-cycle inventory data. In defining the database structure, emphasis was placed on including as much as possible information from other databases.

ProBas currently offers data from the following sources:

- UBA: Data from the 'Emission Factor Handbook for Passenger and Freight Transport Processes – year 2000'; selected data from LCA studies (e.g. packaging), and selected time series from the central emissions reporting system (ZSE)

- GEMIS: selected data from Öko-Institut on energy and materials plus biomass processes – (May 2004)
- APME: data on plastics as of 1999
- ETH Zurich: selected data from ecoinvent as of 1996

ProBas's data stock will be extended by integrating further sources in the forthcoming years.

The Future of ProBas

- Today, ProBas is not a data source, but a web-based interface (virtual library). External data are neither edited nor commented when included in the ProBas database, and the Umweltbundesamt does not accept liability for the correctness of these data.
- Still, the quality of process data is a key issue for users and is therefore of central importance for the future dissemination and the use of data from ProBas.
- As of now, ProBas offers the documentation of *meta data* (information *about* data, e.g., origin, age, etc.), which provides at least some hints for estimating data quality.
- In the future, some core data records concerning, e.g., electricity and heat generation, transport, and relevant materials (metals, plastics, etc.) will independently be checked for their plausibility ('quality check'), and this check is considered for late 2005.
- Checking the quality of process data cannot be carried out only within ProBas. UBA and Öko-Institut are actively involved in several – including international – initiatives dealing with the provision and quality of life-cycle data. This indicates the national and international interest in high-quality data.
- UBA will continue to offer and maintain ProBas and will extend its Internet site to a 'data platform' especially for small and medium-sized enterprises.

More information on ProBas is available from:

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